

*U.S. Farm security administration, Region V.*  
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WAR FOOD ADMINISTRATION

✓ FARM SECURITY ADMINISTRATION

✓ REGIONAL ENGINEER'S OFFICE

MONTGOMERY 4, ALABAMA

✓  
SPECIFICATIONS

FOR

DWELLING

(MASONRY CONSTRUCTION)

**MAY 14 1948**

June 1, 1944  
(Revised March 26, 1945)

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1. GENERAL:

The intent of the drawings and specifications is to provide for the complete construction of the dwelling, whether or not all details are shown or described.

2. LOCATION:

The Owner, after consultation with the engineer or supervisor, will give the Contractor sufficient information from which to locate the house.

3. SCOPE OF WORK:

These specifications are for the complete construction of the dwelling in accordance with the drawings, inclusive of kitchen cabinet. Install 3/4" supply pipe and 2" drain pipe from floor level through floor to outside of wall as detailed.

4. FOOTINGS:

Footings shall be of concrete upon solid undisturbed earth, bottom of footing to be not less than 1'6" below grade.

5. EXCAVATION:

The excavation in all cases shall extend to the depths, and shall be in form and size required for the installation of the work, as indicated on the drawings.

Clear and remove all grass, brush, loose stones, and remove top soil to its full depth within the building lines; prior to foundation excavation pile top soil for grading around exterior.

6. FILLING AND GRADING:

Prior to backfilling around walls, the exterior and interior surfaces of masonry units shall receive one heavy mop coat of hot asphalt applied from top of concrete footing to grade line on exterior, and to floor line on interior, as indicated on drawings. Backfilling around the exterior walls must be done with clean earth dampened and tamped in layers not to exceed 4" in thickness.

The finished floor line in no instance shall be less than 8" above the original grade. Filling up to within 4" of the bottom of concrete slabs must be done with clean earth as outlined in the foregoing paragraph. 4" of gravel, crushed stone, cinders, or sand filling as indicated on drawing, tamped to a true and uniform level must be provided for the concrete slabs.

The ground around the entire building shall be uniformly graded to provide drainage away from both the walls and the immediate premises.

7. CONCRETE AND MASONRY:

Fine Aggregate: Sand for concrete and masonry shall consist of hard, durable uncoated grains, free from dirt. Masonry sand shall pass a No. 8 sieve, with not more than 20% passing a No. 50 sieve, or more than 5% passing the No. 100 sieve.

Coarse Aggregate for concrete shall consist of crushed stone, gravel, or slag of clean, hard, uncoated particles free from dirt. Coarse aggregate for concrete slabs shall not be larger than 3/4".

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Water: Only clean, clear water shall be used in the mixing of concrete or mortar.

Mortar shall consist of one part masonry cement (Medusa, Brixment, Mortar-Mix or equal) and three parts of clean sand, or one part Portland cement, 1 part lime and 6 parts sand. Mortar shall not be retempered.

Concrete shall consist of one part Portland cement, two and one fourth parts clean, sharp sand, and three parts clean stone, gravel or slag. Both fine and coarse aggregates and water shall be accurately measured for each batch of concrete. Use one cubic foot boxes for measuring aggregates. All concrete shall be of a mushy, workable consistency, easily handled and placed without segregation; never soupy or sloppy.

Forms: Natural excavated ground may be used for any form for footings provided the excavation is to proper line, grade and size, and the sides and bottoms are even, solid, and will not break off during construction.

If possible, second-hand lumber shall be used for form work and its maximum re-use shall be made.

All tie rods, anchor bolts, pipes, inserts, sleeves, etc., called for on details or as required, or any other accessories shall be accurately and securely placed to prevent displacement during pouring. No forms shall be removed within 48 hours after the concrete has been poured.

Mixing Concrete: Before mixing and placing concrete, all equipment for mixing and transporting the concrete shall be cleaned of all foreign materials and hardened concrete shall be removed from the inner surfaces of the mixing and conveying equipment. All equipment shall be thoroughly cleaned at frequent intervals during the placing of concrete.

Concrete shall be mixed in a batch mixer, for not less than one minute after all the materials are in the mixer drum, and until the mix is uniform in color and homogeneous. The mixer shall not be loaded above its rated capacity. The mixer must be completely discharged before recharging.

Floor Slabs: Prior to placing concrete for floor slabs, install two layers of 15 lb. felt over smoothly compacted gravel, crushed stone, cinders or sand fill. First layer of felt shall be laid with 4" lap, well mopped with hot asphalt or other bituminous material. The second layer of felt shall be laid in opposite direction and in a similar manner.

Concrete shall be conveyed from the mixer to the place of final deposit as rapidly as practicable in carts, buggies, or by methods which will prevent the separation or loss of ingredients.

Concrete Finish: The surface of concrete floor slabs shall be finished true and troweled to a smooth, hard finished surface. After striking off the top to the established grade, it shall be thoroughly compacted and floated to a true finish with a wood float and tested with a straight edge to detect high and low spots, which shall be eliminated.



The floating shall be followed by steel troweling after the concrete has hardened sufficiently to prevent excess fine material from being worked to the surface. Troweling shall be minimum, consistent with a smooth surface free from defects and blemishes. Porch floors shall be finished with a slope as indicated on drawings. All floors shall be cured and properly protected immediately after finishing. The day following installation of floor slabs, they shall receive two coats of chemical hardener, applied in accordance with the individual manufacturer's directions. The floor hardener shall be similar to Truscon "Agatex" chemical hardner for concrete floors.

Floor slabs shall be protected from drying out for not less than 5 days by covering with sand, earth, straw, burlap, or canvas kept moist for entire period.

The placing of concrete for floor slab shall be completed in one operation, stopping each slab at an expansion joint.

Concrete Work During Freezing Weather: In cold weather concrete shall only be mixed and placed when the temperature is at least 40 degrees and rising.

Expansion Joints shall be installed where called for on the drawings. Each joint shall be full depth of floor slab,  $\frac{3}{4}$ " wide and completely filled with a waterproof asphaltic strip or prepared strips of Celotex full size of joint, finished smooth with all exposed surfaces.

8. CONCRETE MASONRY UNITS:

Concrete masonry units shall be 8"x8"x16" and 4"x8"x16", nominal size, and shall be so made that when laid the cells will extend vertically. Both outer shells of each unit, which run parallel with the wall shall be not less in thickness than  $\frac{1}{4}$ " at any point. They shall have a compressive strength of not less than 700 lbs., and have a maximum absorption of not more than 10%. Masonry units must be adequately cured and at time of delivery shall be tough enough to prevent excess breakage.

9. LAYING CONCRETE MASONRY UNITS:

All masonry units shall be laid plumb, true to line and courses level. All bond shall be kept plumb and uniform. Joints shall not be less than  $\frac{5}{16}$ " nor more than  $\frac{1}{2}$ ". Vertical joints shall be shoved tight. All joints, horizontal and vertical, on exterior of building shall be struck off flush with wall surface and when partially set shall be compressed and compacted with a rounded tool. All joints on interior shall be flush or plain cut, wiped smooth with a carpet float and pointed up before initial set.

The top of 8" masonry block walls, shall have a 2"x8" plate, and top of 4" masonry walls a 2"x4" plate, bolted down with  $\frac{1}{2}$ "x12" bolts, washers each end, spaced 5'-0" o.c. Where bolts occur, the second course down from top shall be covered with a 6" strip of galvanized hardware cloth or metal lath, and the cells completely filled with concrete to secure bolts. Interior partition walls shall be bonded to exterior walls with corrugated metal ties placed in every other joint. Where one interior partition wall joins another they shall



be securely bonded in a similar manner. Concrete masonry units shall be dry when laid in wall. Mortar beds or joints in no case shall extend more than 2" from either face (do not butter all the way across the webs).

Front porch posts shall be of 8"x8"x16" concrete masonry units as detailed on plans -- core to be completely filled from bottom to top with cement mortar and finished as specified under Section 34.

10. CLEANING AND POINTING:

On completion of the work all exposed masonry, both exterior and interior, shall be cleaned of all excess mortar. All joints in masonry work shall be examined to locate cracks or holes, or other defects in same, and all such cracks or holes shall be carefully pointed up and filled with mortar, after first having wetted the old surface to insure bond.

Masonry shall be protected from frost when and where necessary. At the end of each day the tops of masonry walls shall be securely covered with 15 lb. felt that will keep water from entering the top of the wall.

11. FIREPLACES AND CHIMNEYS:

Only hard burned common brick shall be used except for backs and sides of fireplaces which shall be lined with fire brick set in fire clay mortar. (Dip brick in mortar of thick cream consistency and rub in place. NEVER spread mortar on fire brick with a trowel).

All chimneys shall be lined with terra cotta flue lining as shown on plans and details. Flue lining shall be set in place as the masonry work progresses and thoroughly imbedded in mortar.

Place cement wash on top of all chimneys and fireplace smoke chamber.

Flashing shall be built into the brickwork not less than 2" with full mortar joints, and lapped not less than 3".

12. CARPENTRY - MATERIALS:

Lumber for door frames, window frames, screen frames and sash, shelving, trim and mouldings, (exterior siding, porch ceiling, where used) shall be No. 1 Common Southern Yellow Pine (short or long leaf) or better, kiln-dried and dressed.

Lumber for roof sheathing or stripping may be No. 3 Common Southern Yellow Pine (short or long leaf) or better. All other lumber shall be No. 2 Common Southern Yellow Pine (short or long leaf) or better, unless otherwise specified. All lumber shall be thoroughly dry.

Equivalent grades of other species of lumber of equal structural quality are also acceptable.

Asphalt felt used under composition roofing and concrete floor slabs shall be 15 lb. asphalt impregnated fiber felt.

Screen cloth shall be 16 mesh galvanized screen wire.



13. STRUCTURAL FRAMING:

It is the intent of these specifications and accompanying drawings that all manner of framing and other wood construction shall be braced, nailed, and the component parts put together in a strong, rigid manner and otherwise in accordance with good practice. Any nailing, bridging, blocking, "nailers", etc., required to produce this result, regardless of whether same are specifically called for shall be installed when and where as required.

14. ROOF STRIPPING AND SHEATHING:

Place over roof rafters solid decking if and when not restricted by WPB Order; otherwise, use 1"x4" strips spaced 5" o.c. covered with 1/2" Gypsum board applied in accordance with manufacturers directions for composition shingles. Sheath solid for all crickets and at the ridge line of roof, over-hang at gable ends and at eave line as indicated on drawings.

15. EXTERIOR MILLWORK:

The exposed surfaces of finish woodwork shall be smooth and shall be well jointed, put up to a straight line and solidly nailed in place.

16. WINDOW SASH:

All sash shall be 1 3/8" thickness; mortised, tenoned, pinned, glued and rabbeted for glass.

17. GLAZING:

Glass shall be single strength "B" quality, secured with glazier's points and puttied.

18. EXTERIOR AND INTERIOR DOORS AND FRAMES:

Unless otherwise indicated on drawings, exterior doors shall be 1 3/4" thick glazed with nine lights or equivalent. Interior doors shall be 1 3/8" thick of 5 cross panel construction. All doors shall have solid stiles and rails mortised, tenoned and glued.

19. CEILING SCUTTLE DOORS:

Provide scuttle door constructed of boards and battens, to match ceiling finish, where shown.

20. WOOD LOUVERS:

Construct wood louvers where indicated and as detailed. Cover back of louver with screen wire securely tacked in place with batten or molding.

21. WINDOW AND DOOR SCREENS:

All exterior openings shall be screened. Window screens shall cover the entire length of the window and be secured in place with standard screen hangers and 2" hook and eye. Screen frame shall be of 3/4" x 2 5/8" stock throughout with standard screen mold covering edges of mesh. Door screen frames shall be 1 1/8" thick, with 3 5/8" top, side and intermediate rails and 5 5/8" bottom rail. The lower panels shall be provided with a guard of 1/2" mesh, 20 gauge steel wire hardware cloth. All door and window screen frames shall be mortised and tenoned, and have corners additionally reinforced with corner irons or angle braces. (See detail of screen door).



22. WORK PORCH SCREENS:

Screen rear porch with 16 mesh screen cloth, molding, etc. as detailed.

23. INTERIOR MILLWORK:

Millwork shall be standard stock design, secured with fine finishing nails and screws where required.

24. CEILINGS:

Ceilings may be covered with any of the recognized brands of insulation board of thickness not less than  $\frac{1}{2}$ " such as that manufactured by U. S. Gypsum, Celotex Corporation, Johns-Manville, and National Gypsum Company, and shall be applied in accordance with manufacturer's directions. 2"x4" nailing strips shall be cut into ceiling joists as indicated on drawings or as required by the type of insulating board used.

25. THRESHOLDS:

Provide standard beveled thresholds at all exterior door openings except at screen door on work porch. Thresholds shall be firmly secured and laid in mastic.

26. CLOSTES:

Closets shall be fitted with shelves, supported on 1"x3" cleats. Provide  $\frac{3}{4}$ " galvanized steel pipe or 1" diameter Oak rod for hanging rods; rods shall be let into cleats.

27. KITCHEN CABINETS:

Kitchen counter top shall be constructed of 1"x4" S4S No. 1 or better grade, cleated on bottom side with 1"x2" wood cleats. Board shall fit snugly but not drawn up tight. Top shall be sanded smooth and joints filled with wood filler thoroughly rubbed in and finished with one coat of shellac or varnish -- counter top cover to be of  $\frac{1}{8}$ " Masonite. When not available owner shall furnish linoleum or other suitable covering.

28. ANCHOR BOLTS AND LINTELS:

Furnish and install all anchor bolts where indicated. Angle lintels over fireplace openings shall have not less than 4" bearing at each end. All miscellaneous iron and steel work shall be painted one shop coat of red lead and oil before erection.

29. FINISHING HARDWARE: (All hardware shall conform to Schedule 1, WPB Order 256, as amended).

Lower sash of all windows shall be provided with approved type sash fasteners and two approved type rubber cushioned side window fasteners or any approved methods of sash balancing.

Exterior doors shall have three 4"x4" butts on each door and mortise lock set with face plates and knob. Interior doors shall have two  $3\frac{1}{2}$ "x3 $\frac{1}{2}$ " butts on each door and rim knob lock sets. Screen doors shall have three hinges 3"x3", one 18" coil spring, one 3" hook and eye and one door pull on outside.

Kitchen cabinets shall have necessary hinges, friction or elbow catches, door and drawer pulls.



Ridge roll shall be designed for and fit the type of metal roofing used.

Side laps shall be made to the lee side of the prevailing winds. Sheets shall be so laid that they will project over edge of sheathing following rake and malleted down and nailed to edge of sheathing.

At intersection of shed type porch roof with main house roof, provide flashing strips extending out on porch roof at least 12" and up under main roof at least 8".

38. APPLICATION OF COMPOSITION SHINGLE ROOFING:

Slate surfaced asphalt shingles shall be applied in strict accordance with manufacturer's directions. (20" width metal valleys are preferred to lapped shingles).

39. INSTALLATION OF FLASHING:

Flashings shall be furnished and installed where required to make the work water and weather tight.

The exposed edges of all counter flashings shall be doubled back 1/2" in such a manner as to conceal them from view and to provide stiffness.

Joints between individual flashing sheets shall be lapped 2" in direction of flow. All chimneys shall be flashed and counter flashed as shown on plans or detail drawings. Counter flashing shall lap the base flashing not less than 4", and be built into masonry as the work progresses. Flashing shall be shingled into the roof courses as roof shingles are laid, not less than the width of 12".

40. PAINTING:

This work includes furnishing all material and performing all labor necessary to do all painting specified or required.

41. APPLICATION OF PAINT:

All surfaces to be painted shall be perfectly smooth, clean, free from scratches and dust and thoroughly dry.

No coat shall be applied until the preceding one is thoroughly dry and no painting shall be applied in freezing weather.

The finishing coat shall be free from noticeable laps and brush marks.

After fitting sash, the running edges of side rails of sash shall be given one coat of boiled linseed oil. All other exterior parts of sash shall be painted.

The bottom and top edges of all doors to be painted, that are required to be trimmed in fitting, shall be given one coat of paint immediately after trimming.

All window and door frames, louvers, sash and doors shall be primed on all surfaces except as noted below.



The exterior doors shall be primed on the exterior faces and four edges. Interior faces of doors and sash shall be left unfinished.

All exterior trim shall be primed on the back before being applied.

The bottom course of siding shall be primed on all faces before installation.

All exterior siding and trim shall be primed with one coat of paint immediately after being placed. This includes all interior and exterior surfaces of porches.

All knots, sap pitch streaks or spots shall be brush coated with White shellac or aluminum paint after priming coat is applied.

After the priming coat has been applied, all nail holes and voids of any kind shall be puttied flush with the surface.

42. PAINT FOR EXTERIOR WOODWORK:

Unless otherwise specified, all exterior woodwork shall be given three coats of paint. Paint shall be of first grade standard brand ready mixed lead, zinc, titanium formula such as, Sherwin-Williams "SWP" brand, duPont "40 Outside White", Pittsburgh Plate Glass "Sunproof", or equal, applied in strict accordance with manufacturer's directions.

The exterior prime coat may be of first grade aluminum paint if desired.

43. PAINTING PORCH FLOORS:

Front and work porch floors shall be laid with edges well coated with white lead paste.

Floors, steps and stringers shall be painted with two coats first grade porch and deck paint, SW brand or equal.

44. INTERIOR PAINTING:

No interior painting, staining or waxing required except when specified by special addenda or alternate attached to these specifications.



All window and door frames, louvers, sash and doors shall be primed on all surfaces except as hereinafter noted.

The exterior doors shall be primed on the exterior faces and four edges.

All exterior trim shall be primed on the back before being applied.

All exterior trim shall be primed with one coat of paint immediately after being placed. This includes all interior and exterior wood surfaces of porches.

All knots, sap patch streaks or spots shall be brush coated with white shellac or aluminum paint after priming coat is applied.

After the priming coat has been applied, all nail holes and voids of any kind shall be puttied flush with the surface.

Interior Woodwork: All doors, windows, casings, bases, picture molding, and kitchen cabinet shall receive one prime coat thinned with linseed oil replacement, and then be given one finish coat of gloss enamel (white or light ivory).

Ceilings shall be of Celotex, Gypsum Board, or Rock Lath, with one coat of standard brand of Casein paint, Kemtone, or any standard resin-emulsion paint (ivory color).

37. CLEANING UP:

After completion of the work, all construction equipment, machinery, surplus and discarded materials, debris and temporary structures belonging to or used by the Contractor shall be removed from the site.

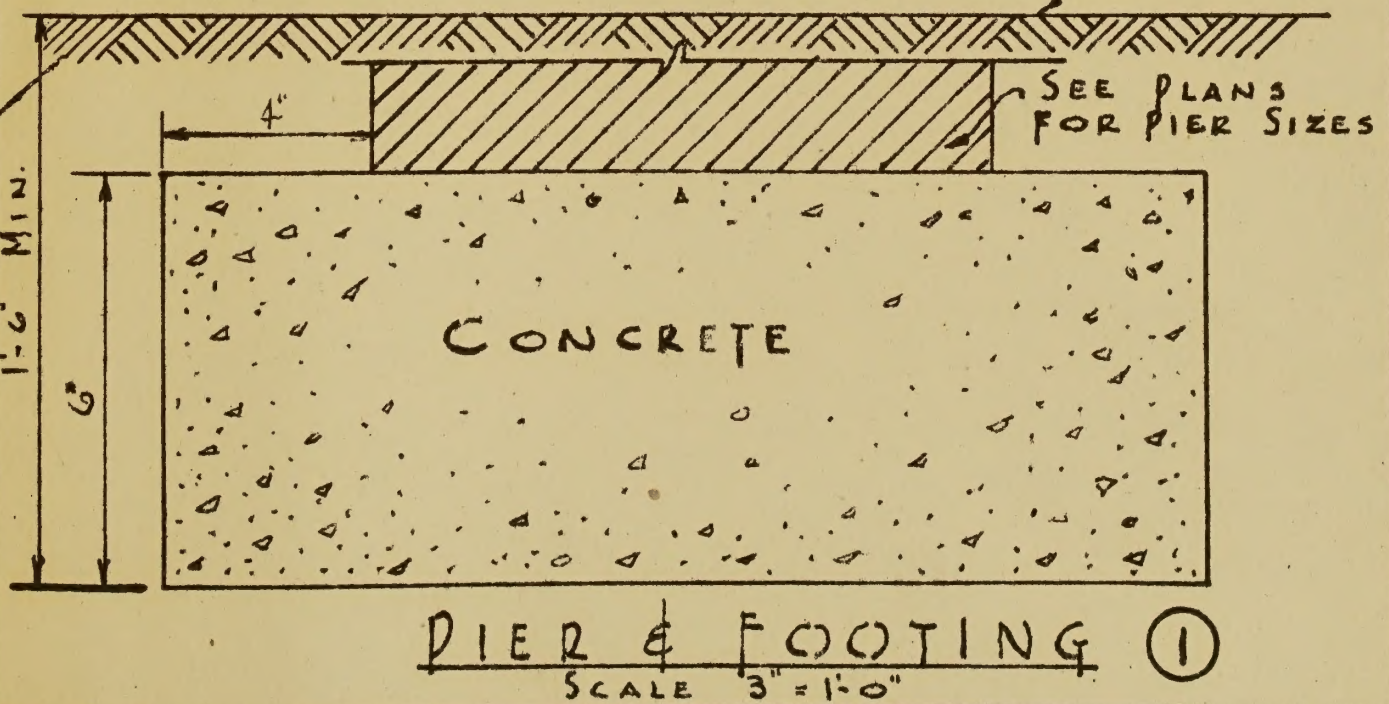
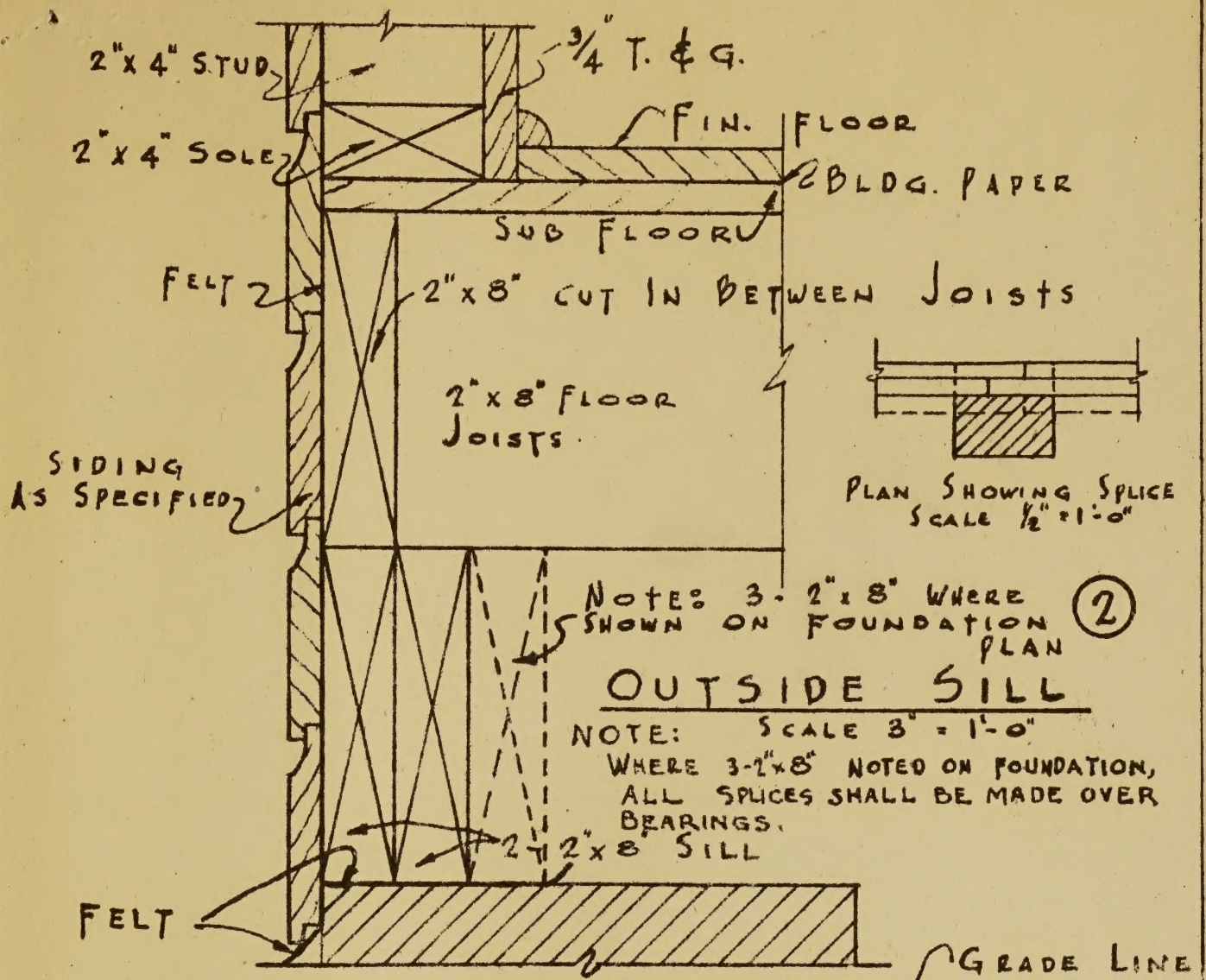
All glass and screening in buildings shall be cleaned and structures left "broom clean" upon completion. Public and private property damaged during construction shall be restored by the Contractor at his own expense. All staging, scaffolding, containers, debris, etc., shall be removed from the premises, leaving all painting in a perfect and clean condition.

The painters shall go over the retouch or repair all surfaces damaged since painting, remove splashed paint where and as directed by the Owner's representative.









STANDARD DETAILS REV. 4-1-40

U.S. DEPT. OF AGRICULTURE - FARM SECURITY ADM.  
DIST. 2, REGION 5 - MONTGOMERY, ALABAMA



